Public Works (1902.) Department.

G.O., No. 6907 I.
691

DATED 18 June 1902.

10 copies of G.O.
3
38 copies of letter with
2 docket at the back for
the G. of I.
30 copies of letter for record.

20/6/02

[Despatch Abstract.]

Tanks, & beds of ~~certain~~ tanks in the Kunnathur Group, Periyar Project.

The estimates, aggregating Rs 6932, for abandoning certain —— by excavating drainage channels sanctioned, and a copy of the Pro: ordered to be forwarded to the G. of I. for information.

=

Tanks and beds of tanks in the Kunnathur Group, Periyar Project

Forwarding a copy of the Pro: sanctioning the estimates, aggregating Rs 6932, for abandoning certain —— by excavating drainage channels.

P. W. 26.
500—12-8-01.

INDEXED

276

IRRIGATION.
ACCOUNT.

Government {1902} of Madras.

PUBLIC WORKS.

Recd.	1902.	*Enclosures*
Regd.		*Spare copies*

G.O., Nos. 690, 691 I., 18th June 1902.

JUNE.

Tanks and beds of tanks in the Kunnathur Group, Periyar project

Forwarding a copy of the Proceedings sanctioning the estimates, aggregating Rs. 6,932, for abandoning certain —, by excavating drainage channels.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers :—

From the Superintending Engineer, VI Circle, dated 21st April 1902, No. 574 M.D.

ENCLOSURES.

REPORT to accompany the estimate for abandoning minor tanks lying above Pidari endal in Madura taluk.

	RS.
Amount of estimate	3,600

It is now proposed to abandon all the Government tanks in the area bounded on the north by the Chittampatti offtake, east by Melur road, south by the Kunnathur offtake, and on the west by the 9th branch channel, except Aiyalangudi periyakanmoy, which alone will be "left as it is." The tank beds will be drained by breaching the bunds and excavating two separate drains Y Z and W X along the lines of lowest fields as shown in red line on the sketch plan accompanying the estimate.

Discharge.—The discharge for these drainage channels has been calculated from the formula $D = CM^{\frac{2}{3}}$ which corresponds to a rainfall of 18·5 inches in 24 hours over the catchment. The observed heaviest rainfall is not even one-half of this; and it is considered sufficient, therefore, if the drains are designed for one-half of the discharge given by the formula $D = CM^{\frac{2}{3}}$, C being taken as 500.

The drainage channel Y Z takes a straight course, along the valley line from its head as far as Uppurani; thence its curves along the inner toe of the bund of Paramanedal kanmoy leaving it a short distance from its right flank. The discharge at the tail end of the drain where it crosses the Melur road culvert will be about 250 cubic feet. The road culvert, though of theoretically insufficient waterway, may be left as it is, as no appreciable damage has been observed during many years past, and as the road is so low that any exceptional flood would pass over it. No banking is necessary throughout, but the spoil from 34th chain to the end will be thrown entirely on the left side of the drain and that higher up, on both sides, gaps being left in suitable places for the inflow of drainage water.

The other drain WX will start from Aiyalangudi sinnakanmoy, following the surplus course of this tank for a distance of 700 feet; thence it will run to Kalliyangulam and will finally tail into Pidari endal through the road culvert at X, which may be left as it is for the same reasons as given above for the other road culvert Z.

Provision has been made for the acquisition of land wherever necessary (*vide* list enclosed).

It will be seen from the accompanying statement that there will be 196 acres of land available for sale after omitting the extent required for the drains; but so as to allow for tank bunds and portions of tank bed unfit for cultivation, it is assumed that not less than 160 acres

will be available for auction; which, at the rate of Rs. 80 per acre, will realize Rs. 12,800; and deducting the amount of estimate, Rs. 3,600, there is a net profit of Rs. 9,200—

	RS.
160 acres at Rs. 6 per acre	960
4 per cent. interest on Rs. 9,200 per annum	368
	1,328
Less land revenue on 6·5 acres	39
	1,289

say 36 per cent. on the amount of the estimate.

(Signed) W. J. J. HOWLEY,
22nd November 1899. Ex. Engr., Special Periyar Divn., Madura.

REPORT to accompany the estimate for Vellangulam drainage channel.

	RS.
Amount of estimate	2,400

The estimate provides for abandoning Rajakkur and Kollavattan tanks by excavating a drainage channel as shown in the accompanying sketch-map. The drainage channel will be excavated from the junction of surplus channels of Nattamangalam and Achangulam tanks following the old surplus course for about 10 chains and thence parallel to the tank bunds of Rajakkur and Kollavattan until its termination in Villangulam tank.

No lands need be acquired for the drain as the whole length of the drain passes through Government waste and poramboke. The banks will be on both sides for the first 10 chains and on the right side beyond.

The drain is practically the surplus channels of the two tanks Nattamangalam and Achangulam, the surplus discharge of which is 1,380 cusecs. The drain is 55 feet wide from head to 2,825 feet with a bed fall of 1 in 500, and 80 feet wide with a bedfall of 1 in 1,000, 4 feet deep and side slopes of $1\frac{1}{2}$ to 1, and is capable of discharging 1,509 and 1,556 cusecs, respectively, which are slightly more than a runoff of 6 inches of rain in 24 hours from the drainage area of 9 square miles.

The alignment is along the deep tank bed.

Means of irrigation for the abandoned tank beds has been provided for in the estimates for repairing Nattamangalam and Vaighaneri and Semmalepuliyangulam tanks.

The work will be carried out according to the current departmental standard specifications.

(Signed) H. T. KEELING,
1st September 1900. Ex. Engr., Madura Division.

No. 160 I.

Note by the Chief Engineer for Irrigation.

The Superintending Engineer, VI Circle, submits two estimates, amounting to Rs. 3,600 and Rs. 2,400, respectively—the one for abandoning the beds of the marginally-noted minor tanks above Pidari endal and excavating two drainage channels therefrom, and the other for abandoning Rajakkur and Kollavattan tanks by excavating a drainage channel through them which will terminate in Vellangulam tank in the limits of the Kunnathur tank group, Periyár project. It is expected that by this arrangement an extent of about 248 acres will become available for irrigation which will yield a revenue of Rs. 1,488 per annum. The estimates may be sanctioned.

Pudukulam.
Chinnakulam.
Andyappan endal.
Kanjirangulam.
Thottichikulam.
Kallathikulam.
Puliadithan.
Uppurani.
Vannangulam.
Kalliyangulam.
Peekulam.
Navakundu.
Paramanedal.

2. The works are classed as remunerative and will be completed by the 31st March 1903.

(Signed) A. W. SMART, Col., R.E.,
6th June 1902. Ag. Chief Engineer for Irrigation.

Order—No. 690 I., dated 18th June 1902.

The following estimates are sanctioned:—

Imperial.
49. Irrigation.
Capital expenditure not charged to revenue.
Periyár project.
Open Capital Account.
I. Works.
(4) Drainage and Protective Works.
Chittampatti offtake.
9th Branch channel.
Remunerative works.

(i) Abandoning the beds of certain minor tanks above Pidari Endal and excavating two drainage channels therefrom.

	RS.
B. Land—	
Compensation for land	1,950
L. Earthwork—	
Excavating two drainage channels	1,625
O. Miscellaneous—	
Demarcation stones	25
Total, I. Works	3,600
II. Establishment ...	380
Total ...	3,980

(ii) Abandoning Rajakkur and Kollavattan tank by excavating a drainage channel through them to terminate in the Vellankulam tank.

	RS.
L. Earthwork—	
Excavating a drainage channel	2,380
O. Miscellaneous—	
Demarcation stones	20
Total, I. Works	2,400
II. Establishment ...	552
Total ...	2,952

2. These sanctions are registered as Nos. 74 I. and 75 I. of 1902–1903 and will expire on the 31st March 1903.

3. It is presumed that the Collector has been consulted on the subject with reference to G.O., No. 176 I., dated 20th February 1897.

4. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. 691 I., dated 18th June 1902.]

(True Extract.)

(Signed) A. W. SMART, Col., R.E.,
Ag. Joint Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
,, Superintending Engineer, VI Circle, with plans and estimates.
,, Examiner, Public Works Accounts.

Endorsement—No. 691 I., dated 18th June 1902.

Forwarded.

(By order.)

(Signed) A. W. SMART, Col., R.E.,
Ag. Joint Secretary to Government,
Irrigation Branch.

Exd. C. Kuppuswami.

3,00-21-1-01

Public Works (1902) Department.

CURRENT No. ~~76 M.D.~~ Pr/21 / 602 9/2

From

[*Name*] Col. A. V. Boddy R.E.

[*Designation*] Supg Engineer V Circle

[*Station*] Trichinopoly

No. 574 M.D.

Dated 21 April 1902.

Received 26 4 1902.

Registered 1902.

Enclosures { *Plans* 7 / *Others* 2 } *Total* 9. 3. Plans sent separately

Spare copies Sent separately

SUBJECT.

Abandoning Tanks above Pidari Eudal and Excavating Villankulam Drainage Channel — Submitting for sanction Estimates for

BACK PAPERS.

D.E.I. for orders if the estimates might be checked for sanction.

30/4/02

Check — 2/5/02

C.E.I.

26/4/02

FURTHER PAPERS.

The estimate has been checked 15/5/02

To

The Chief Engineer / Secretary to Government, Public Works Department.

Sir,

No. 574 Md.

OFFICE OF THE SUPERINTENDING ENGINEER
6TH CIRCLE,
TRICHINOPOLY, 21 April 1902.

From
Col. A. V. Boddy RE
Superintending Engineer,
6th Circle.

To
The Chief Engineer,
for Irrigation

SIR,

9. ENCLOSURES.
2. Estimate
1. Sketch Map.
6. Plans.

× 3 Plans sent separately

× Item 162 in list printed with Con. 7109 of 20. Feb: 1902

Flag

I have the honor to forward herewith for sanction the following estimates for abandoning tanks in the Kunnathur Tank Group, Periyar Project –

1. Abandoning beds of minor tanks above Pidari Endal. Amount of Estimate Rs 3,600

2 Excavating Vellankulam Drainage channel —— Rs 2400

The tank beds will be drained by breaching the bunds, and where necessary drains will be excavated.

As the tank beds will be

rendered available for sale, the estimates may be classed as remunerative.

CHIEF ENGINEER
FOR IRRIGATION.
2 APR. 1902
No.

I have the honor to be

Sir,

Your most obedt. Servant,

[illegible] Col. R.E.

Supg. Engineer, [illegible] Circle

[illegible]

No. 185 E dt 22.11.99
D/23 — Report to accompany the estimate for abandoning minor tanks lying above Pidari Endal in Madura Taluq.

SUPG. ENGINEER'S OFFICE, No. 2048R 25 NOV. 1899 P. W. D. SIXTH CIRCLE. II

2 sp

Enclos

1. Estd file
4 Tracings
/5.

Amount of Estimate Rs 3600

SUPG. ENGINEER'S OFFICE, No. .... 24 MAR. 1902 P. W. D. SIXTH CIRCLE.

CHIEF ENGINEER FOR IRRIGATION. 26 APR. 1902 No. ....

It is now proposed to abandon all the Government tanks in the area bounded on the north by the Chittampatti offtake, east by Melur road, south by the Kunnathur offtake and on the west by the 9th Branch channel, except Aiyalangudy Periya Kanmoy which alone will be left as it is. The tank beds will be drained by breaching the bunds and excavating two separate drains y.z. and w.x. along the lines of lowest fields as shown in red line on the sketch plan accompanying the estimate.

Discharge

The discharge for these drainage channels has been calculated from the formula $D = C M^{\frac{2}{3}}$ which corresponds to a rain fall of 18.5 inches in

in 24 hours over the catchment. The observed heaviest rainfall is not even one half of this; and it is considered sufficient therefore, if the drains are designed for one half of the discharge given by the formula $D = CM^{\frac{2}{3}}$. C being taken as 500.

The drainage channel y.z. takes a straight course, along the valley line from its head as far as Uppurani; thence it curves along the inner toe of the bund of Paramanedal Kanmoy leaving it a short distance from its right flank. The discharge at the tail end of the drain where it crosses the Melur road culvert will be about 250 cft. The road culvert, though of theoretically insufficient ~~insufficent~~ waterway, may be left as it is, as no appreciable damage has been observed during many years past and as the road is so low that any exceptional flood would pass over it. No banking is necessary throughout,

but the spoil from 34th chain to the end will be thrown entirely on the left side of the drain and that higher up, on both sides, gaps being left in suitable places for the inflow of drainage water.

3 S.P.

The other drain W.X. will start from Aiyalangudy Sinna Kammoy, following the surplus course of this tank, for a distance of 700 feet, thence it will run to Kalliyangulam and will finally tail into Pidari Ludal through the road culvert at X, which may be left as it is for the same reasons, as given above for the other road culvert Z.

Provision has been made for the acquisition of land wherever necessary (Vide list enclosed)

It will be seen from the accompanying statement that there will be 196 acres of land available for sale after omitting the extent required for the drains,

but

but so as to allow for tank bunds and portions of tank bed unfit for cultivation, it is assumed that not less than 160 acres will be available for auction; which, at the rate of 80 Rs per acre, will realize 12800 Rs; and deducting the amount of estimate, Rs 3600, there is a net profit of 9200 Rs.

160 acres at 6 Rs per acre	= 960
4 p.c. interest on 9200 Rs per anum	= 368
	1328
Less land revenue on 6.5 acres	Rs 39
	Rs 1289

Say 36 per cent on the amount of the estimate.

[signature]
Executive Engineer
Spl Periyar Dn.
Madura

22/11/99

22 NOV 1899

1157 960

Report to accompany the estimate for Vellangulam drainage channel.

4 S. P.

SUPG. ENGINEER'S OFFICE
No. ....
20 SEP. 1900
P. W. D.
SIXTH CIRCLE.

Amount of estimate Rs 2400.

SUPG. ENGINEER'S OFFICE
No. ....
24 MAR. 1902
P. W. D.
SIXTH CIRCLE.

CHIEF ENGINEER
FOR IRRIGATION.
26 APR. 1902
No. 76 MD
4

The estimate provides for abandoning Rajakkur and Kollavattan tanks by excavating a drainage chal. as shown in the accompanying sketch map. The drainage channel will be excavated from the junction of surplus channels of Nattamangalam and Achangulam tanks following the old surplus course for about 10 chains and thence parallel to the tank bunds of Rajakkur and Kollavattan until its termination in Vellangulam Tank.

No lands need be acquired for the drain as the whole length of the drain passes through Govt. waste and Poramboke. The banks will be

on both sides for the 1st 10 chains and on the right side beyond.

The drain is practically the surplus channels of the 2 tanks Nattamangulam and Achangulam; the surplus discharge of which is 1380 cusecs. The drain is 55 feet wide from head to 2825 feet with a bed fall of 1 in 500 and 80 feet wide with a bed fall of 1 in 1000, 4 feet deep and side slopes of 1½ to 1, and is capable of discharging 1509 & 1556 cusecs respectively, which are slightly more than a run off of 6" of rain in 24 hours from the drainage area of 9 sq miles.

The alignment is along the deep tank bed.

Means of irrigation for the abandoned tank beds has been provided for in the estimates for repairing Nattamangalam and Vaighaneri and Semmalipuliyan-gulam tanks.

The work will be carried out

out according to the current departmental standard specificat

55 p

A. I. Kuhn
1.9.00
Executive Engineer
Madura Div

W

Encl. 3. + 1. Estimate
1 Sketch map
1 L. Section
1 C. Section

PwE8 / 6049/2

PL 7 OM 12 } C9.

PWC No. 6049 Aud } 16-6-02 Reg }

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

HE

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Estimates for abandoning certain tanks in the Kunnathur group.

UNDER date the

A.

Periyar project

READ the following

From the Superintending Engineer, VI Circle, d/- 21st April 1902, No. 574 MD

Quote 1

20 160 dy 6-6 02

Print Reports

ADm

D.S.

68

Note by the Chief Engineer for Irrigation.

The Superintending Engineer, VI Circle, submits two estimates amounting to Rs 3,600 and Rs 2,400 respectively, the one for abandoning the beds of the marginally ✱ noted minor tanks above Pidari Endal and excavating two drainage channels therefrom and the other for abandoning Rajakkur and Kollavattan tanks by excavating a drainage channel through them which will terminate into Vellangulam tank in the limits of the

✱ Pudukulam
Chinnakulam
Andyappan Endal }
Kanjirangulam
Thottichikulam
Kallathikulam
Puliadithan
Uppurani
Vannangulam
Kalliyangulam
Peukulam
Navakundoo
Paramanidal.

Issue

ADm 12/6/02

D.S.

FR1

mh 12/6

Kunna

Kunnathur tank group, Periyar project. It is expected that by this arrangement an extent of about 248 acres will become available for irrigation which will yield a revenue of Rs 1,488 per annum. The estimates may be sanctioned.

2. The works are classed as remunerative and will be Completed by the 31st March 1903.

Irrign Acct.

Order thereon No. 690 I. of 18th June 1902

The following estimates are sanctioned:-

Imperial.

49. Irrigation.

Capital expenditure not charged to revenue.

Periyar Project

Open Capital account

I. Works.

4. Drainage and Protective works

Chittampatti offtake

9th Branch channel

Remunerative Works.

A

10-6-02

7 8

(i) Abandoning the beds of certain minor tanks above Pidari Eudal and excavating two drainage channels therefrom.

B. Land.	Rs
Compensation for land ..	1,950
L. Earthwork	
Excavating two drainage channels ... } ..	1,625
O. Miscellaneous	
Demarcation Stones ..	25
	3600

	Rs
I. Works	3,600
II Establishment ...	380
	3,980

(ii) Abandoning Rajakkur and Kollavattan tank by excavating a drainage channel through them to terminate ~~into~~ the Vellankulam tank

L. Earthwork	Rs
Excavating a drainage channel ... } ..	2,380
O. Miscellaneous.	
Demarcation Stones ..	20
	240[illegible]

		Rs
I. Works	...	2,400
II Establishment	...	552
		2,952

2. These sanctions are registered as Nos 74 I and 75 I of 1902-03 and will expire on the 31st March 1903.

3. It is presumed that the Collector has been consulted on the subject with reference to G.O. No 176 I of 20th February 1897. × flag N

4. Ordered that a copy of these proceedings be forwarded to the Government of India for information.

Endorsement No. 691 I dy 18. 6. 1902

Forwarded.

DESPATCHED
- 1 JUL. 1902

DESPATCHED
- 1 JUL. 1902

To the Chief Engineer for Irrigation
" the Superintending Engineer, VI Circle with plans and estimates
" the Examiner, P.W. Accounts

[illegible] 6/6/02

[illegible] 3/6/02

E. I. Form No. 1—500—14-5-95